

REMARKS

Claims 1, 4, 7, 12 and 15 stand rejected under 35 USC 102(b) on Kakiuchi (U.S. Patent No. 5,835,143). Applicants respectfully traverse this rejection.

Applicants have amended claim 1 to recite “calculating a focal length from the obtained multiple image data using a peak value of contrast evaluated values of said multiple image data and a peak position corresponding to a position of the peak value.” Kakiuchi does not disclose or suggest such features.

Kakiuchi discloses a system for focusing a lens wherein a color filter is used to filter an image into a color grid (Fig. 2). The filtered image is then captured using a CCD. The captured image is then processed to produce a color signal corresponding to each of the filtered colors. Each signal represents the contract of that color over the captured image. The color signals are then processed to determine the relative contrast of the colors. The signal with the highest contrast is used to determine which color should be used to focus the lens. The lens is then moved to determine the position at which the highest contrast of the chosen color occurs. This position is then determined to be the proper focus position.

Kakiuchi does not disclose or suggest determining or using a peak position as disclosed at least at Figs. 4, 5 and 6 of applicants’ specification. Kakiuchi only discloses using relative values of contrast to determine correct focal length. Accordingly, claim 1 is allowable. Claim 4 depends from claim 1 and is allowable due at least to its dependency. Applicant has amended claim 7 in a manner similar to that of claim 1; claim 7 is therefore allowable for at least the same reasons as claim 1.

Claim 12 recites “using color data of a plurality of colors to detect a focal length for each respective color data and capturing an image at each focal length detected for each respective color data.” Kakiuchi does not disclose or suggest such features.

As stated by the Examiner, Kakiuchi discloses choosing one or more colors to be used to determine a focal length at which to capture an image. However, Kakiuchi does not disclose capturing images at multiple detected focal lengths. Even though Kakiuchi may disclose using multiple colors to determine a focal length, the multiple colors are used to determine a single focal length. Kakiuchi discloses that a color (or colors) is chosen based on a contrast level, and then using that color to determine a focal length, where an image is then captured. Kakiuchi does not disclose that a focal length is ever determined for the non-selected colors, or that individual focal lengths are detected for the selected colors. Accordingly, Kakiuchi only discloses determining a single focal length. Consequently, claim 12 is allowable.

Similar to claim 12, Claim 15 recites an image processor configured to “calculate a focal length for each respective color data mentioned above by using the peak value of contrast evaluated values calculated from the obtained multiple image data.” Kakiuchi does not disclose or suggest such features. As stated above, Kakiuchi is only concerned with determining a single focal length. Kakiuchi does not disclose or suggest that it may be desirable or beneficial to capture an image at multiple focal lengths. Although, as the Examiner notes, Kakiuchi discloses the use of more than one color to determine a focal length, Kakiuchi discloses that the multiple colors are used together to determine a focal length. Kakiuchi does not disclose or suggest that the colors could or should be used to calculate separate focal lengths. Similarly, Kakiuchi does not disclose that it may be beneficial to calculate different focal lengths.

Even though the Examiner states that the one color could be any color, applicants respectfully disagree. For any given image, the method disclosed in Kakiuchi will only use one color or combination of colors to determine a focal length. Kakiuchi discloses a method and system that will always choose the color or colors which have the highest contrast. Contrary to the Examiner’s assertion, this color cannot be “any” color; for any given image the chosen color will only be a specific color, the color having the greatest contrast. Kakiuchi does not disclose or

suggest that a different color may be chosen. In fact, choosing a different color would defeat the entire purpose of Kakiuchi, which is to choose the color or color combination having the highest contrast as the most reliable predictor of focus. Claim 15 is therefore allowable.

Claims 2, 5(1), 5(2), 5(4), 10(7) and 13 stand rejected under 35 USC 103(a) on Kakiuchi in view of Watanabe (U.S. Patent Publication No. 2003/0063212). Applicants respectfully traverse this rejection.

The Examiner has cited Watanabe as disclosing the weighting of elevated values. Watanabe fails to overcome the deficiencies of Kakiuchi detailed above. Accordingly, claims 2, 5(1), 5(2), 5(4), 10(7) and 13, which depend on allowable claims, are allowable due at least to their respective dependencies.

Claims 6(1), 6(4), 8, 9, 11(7), 11(8), 11(9) and 14(12) stand rejected under 35 USC 103(a) on Kakiuchi in view of Omata (U.S. Patent No. 6,067,114). Applicants respectfully traverse this rejection.

The Examiner has cited Omata as disclosing a plurality of image detection areas. Omata fails to overcome the deficiencies of Kakiuchi detailed above. Accordingly, claims 6(1), 6(4), 8, 9, 11(7), 11(8), 11(9) and 14(12), which depend on allowable claims, are allowable due at least to their respective dependencies.

Claims 6(2) and 14(13) stand rejected under 35 USC 103(a) on Kakiuchi in view of Watanabe and Omata. Applicants respectfully traverse this rejection.

As noted above, Watanabe and Omata, alone or in combination, fail to overcome the deficiencies of Kakiuchi detailed above. Accordingly, claims 6(2) and 14(13), which depend on allowable claims, are allowable due at least to their respective dependencies.

Claims 10(8) and 10(9) stand rejected under 35 USC 103(a) on Kakiuchi in view of Watanabe and Omata. Applicants respectfully traverse this rejection.

As noted above, Watanabe and Omata, alone or in combination, fail to overcome the deficiencies of Kakiuchi detailed above. Accordingly, claims 10(8) and 10(9), which depend on allowable claims, are allowable due at least to their respective dependencies.

Claim 16 stands rejected under 35 USC 103(a) on Kakiuchi in view of Yoshida (U.S. Patent No. 5,189,524). Applicants respectfully traverse this rejection.

The Examiner has cited Yoshida as disclosing a warning device for indicating that an image capturing process is underway. Yoshida fails to overcome the deficiencies of Kakiuchi detailed above. Accordingly, claim 16, which depends on allowable claim 15, is allowable due at least to its dependency.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief, including extensions of time, and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. **524642002200**.

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